

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An electric drive system operated with muscle-power (1) for a vehicle (2), said vehicle comprising and/or a stationary training apparatus (3) with a foot pedal (5) and a generator (6) mechanically connected with to the foot pedal, with an electric transmission (4) from the generator (6) to an electric consumer (10) and/or to a drive motor (11), and as well as with an electric control system (20), wherein the electric control system comprises a control program (21) of the generator (6), with which a counter moment GM (GM) on the generator, related to the forwards pedaling direction v (v) is generatable,

wherein the drive system, as a vehicle drive with counter moment, comprises a starting control (22) of the generator, with which, when the foot pedal is actuated from standstill, an immediately occurring pedal resistance TW (TW) is generated and with which a high starting moment MA (MA) is generated at the foot pedal when starting from standstill up to a minimum riding speed;

and wherein the drive system, as a drive with counter moment for a stationary training apparatus (3), comprises a motor operation control (23) with a bidirectional converter (31), with which the generator (6) is also operatable as a motor, with controllable coupling and uncoupling of electric power.

2. (Currently Amended) The drive system in accordance with claim 1, wherein the standstill pedal resistance ~~TW~~ (TW) corresponds to an actuation force ~~F~~ (F) on the foot pedal (5) of at least 200 N.

3. (Currently Amended) The drive system according to claim 1, wherein the starting moment ~~MA~~ (MA) at the foot pedal amounts to at least 40 Nm.

4. (Amended) The drive system in accordance with claim 1, wherein the starting control (22) of the generator is controlled such that the starting acceleration of the foot pedal (bmax) on average amounts to a maximum of 4 ~~rad/sec~~ rad/sec².

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5. (Currently Amended) The drive system according to claim 1, wherein ~~the~~ a resistance or load moment (M1) of the generator is modulated in phase with ~~the~~ a pedal angle (W1).

6. (Currently Amended) The drive system in accordance with claim 1, wherein a standstill braking (71) of the foot pedal is active, which produces a standstill pedal resistance ~~TW~~ (TW) and which is also effective in case the electric control system (20) is switched off.

7. (Currently Amended) The drive system according to claim 1, wherein the generator is short-circuited by ~~means of an electric switch (33) directly or through resistors, capacitors and coils~~ and wherein the electric switch, in case the electric control system (20) is switched off, is closed ~~for the generation of~~ to generate the

pedal resistance ~~TW~~(TW).

8. (Currently Amended) The drive system in accordance with claim 7, wherein the high starting moment (MA) is generated, by means of brief ~~by briefly~~ switching on and switching off (choppering) of the electric switch (33) ~~during the starting, the high starting moment MA is generated.~~

9. (Currently Amended) The drive system according to claim 1, wherein ~~a range of the maximum efficiency of the generator (6) corresponds to a normal range of the pedaling frequency, said normal pedaling frequency range being between about 50—100 rpm~~ the drive system is used as a drive with a counter moment for a stationary training apparatus (3), comprising an electric consumer and a motor operation control (23) with a bidirectional converter (31) with which the generator (6) is also operatable as a motor, with controllable coupling and uncoupling of electric power.

10. (Previously Presented) The drive system according to claim 1, wherein the generator control program (21) comprises several moment characteristics (M60, M120), which are able to be changed over between, and which increase within, a normal range of the pedaling frequency.

11. (Currently Amended) The drive system according to claim 1, wherein at least one of brakes (45) and mechanical storage devices (46) are assigned to, to the foot pedal (5) and to the generator (6), ~~electrical, mechanical or fluid brakes (45), such as braking resistors, eddy current brakes, friction brake pads, gas and fluid~~

~~damping elements or mechanical storage devices (46), such as spring power storage devices or gas and liquid storage devices are assigned.~~

12. (Currently Amended) The drive system in accordance with claim 1, wherein at least one of a blockable free-wheel system (42) and ~~or a switchable clutch (43)~~ is provided between the foot pedal and the generator.

13. (Previously Presented) The drive system according to claim 1, wherein the drive system comprises modular units, said modular units being selected from the group consisting of a pedal generator module (8) with foot pedal (5), generator (6), a possible speed transmission (7) and generator control system (20.1), a control module (20) and a drive motor module (18) with motor (11), a possible speed reduction transmission (12) and a motor control system (20.2).

14. (Currently Amended) The drive system in accordance with claim 1, wherein electric storage devices (14), ~~and in particular a super capacitor (15) (super cap),~~ are provided as short-term storage devices.

15. (Currently Amended) The drive system according to claim 1, wherein further comprising two differently designed motors, (11a, 11b), each respectively for higher and a lower speed range, ~~or a motor with switched windings is provided.~~

16. (Currently Amended) The drive system according to claim 1, wherein operating data, such selected from the group consisting of moments, ~~or torques,~~ powers, and revolutions per min on the foot pedal are recorded and indicated.

17. (Currently Amended) The drive system according to claim 1, further comprising wherein an interface (35) is provided for connecting external devices.

18. (Currently Amended) The drive system in accordance with claim 1, further comprising wherein a removable data storage device (29) is provided, said removable data storage device being operable, which when it is removed, carries out to carry out a closing function of the system.

19. (Currently Amended) The drive system according to claim 1, wherein the electric circuit comprises operating programs (24), ~~resp., driving riding programs (25)~~ for the utilization in training apparatuses, ~~resp., vehicles.~~

20. (Currently Amended) The drive system in accordance with claim 1, wherein the electric control system (20) after a selectable time interval, during which no traveling motion takes place, goes over into one of an inoperative condition and or idle condition and/or the pedal is moved to a desired starting position.

21. (Amended) The drive system according to claim 1, wherein the foot pedal (5) comprises a changeable geometry.

22. (Amended) A vehicle with a drive system in accordance with claim 1.

23. (Currently Amended) A training apparatus with a drive system according to claim 94.